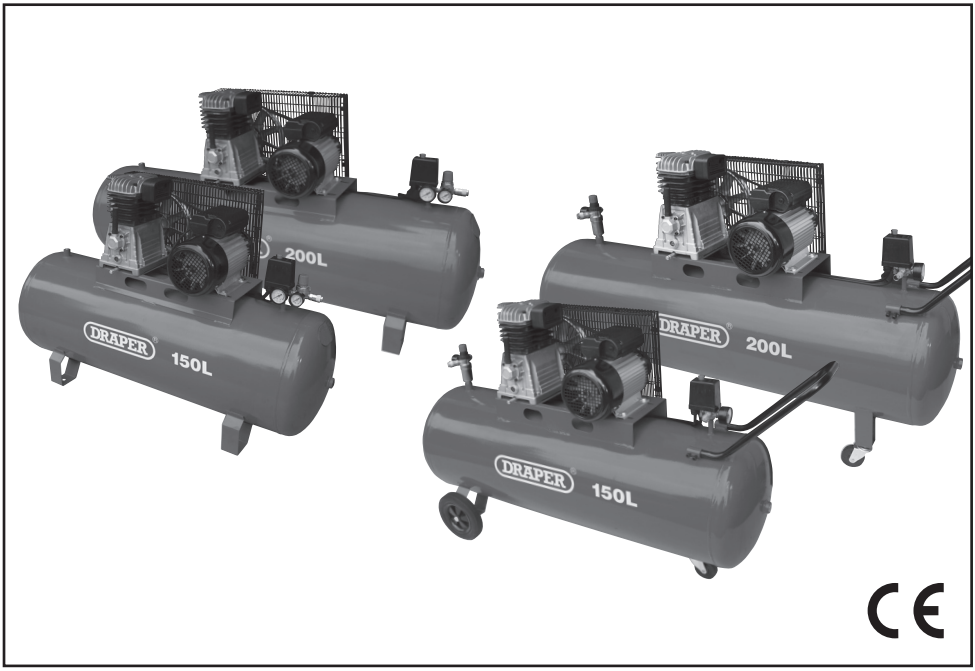
DRAPER®

GB

230V BELT DRIVEN **150/200L**
AIR COMPRESSOR

55304 / 55305 / 55313 / 55315



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR: 230V Belt Driven 150/200L Air Compressor

Stock No's: 55304 / 55305 / 55313 / 55315

Part No's: DA150/369S / DA150/369M / DA200/369S / DA200/369M

1.2 REVISIONS:

Date first published June 2018.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: http://drapertools.com/manuals

Draper Tools Limited
Hursley Road
Chandler's Ford
Eastleigh
Hampshire
SO53 1YF
UK

Website: drapertools.com
Product Helpline: +44 (0) 23 8049 4344
General Fax: +44 (0) 23 8026 0784

1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! – Information that draws attention to the risk of injury or death.

CAUTION! – Information that draws attention to the risk of damage to the product or surroundings.

1.4 COPYRIGHT © NOTICE:

Copyright © Draper Tools Limited.

Permission is granted to reproduce this publication for personal and educational use only. Commercial copying, redistribution, hiring or lending is prohibited.

No part of this publication may be stored in a retrieval system or transmitted in any other form or means without written permission from Draper Tools Limited.

In all cases this copyright notice must remain intact.

2. CONTENTS

2.1 CONTENTS

1. TITLE PAGE
- 1.1 INTRODUCTION 2
- 1.2 REVISION HISTORY 2
- 1.3 UNDERSTANDING THIS MANUAL 2
- 1.4 COPYRIGHT NOTICE 2

2. CONTENTS
- 2.1 CONTENTS 3

3. GUARANTEE
- 3.1 GUARANTEE 4

4. INTRODUCTION
- 4.1 SCOPE 5
- 4.2 SPECIFICATION 5
- 4.3 HANDLING AND STORAGE 5

5. HEALTH AND SAFETY INFORMATION
- 5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE 6-7
- 5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR PRESSURE VESSELS 7
- 5.3 CONNECTION TO THE POWER SUPPLY 8

6. TECHNICAL DESCRIPTION
- 6.1 IDENTIFICATION 9

7. UNPACKING AND CHECKING
- 7.1 PACKAGING 10
- 7.2 WHAT´S IN THE BOX? 10

8. PREPARING THE COMPRESSOR
- 8.1 ASSEMBLING THE WHEELS 11
- 8.2 ASSEMBLING THE CASTOR 11
- 8.3 OIL LEVEL 11
- 8.4 POSITIONING 11

9. OPERATION
- 9.1 INSTALLATION 12
- 9.2 INITIAL STARTUP 13
- 9.3 ADJUSTING THE PRESSURE SWITCH 14
- 9.4 OVERLOAD CUT-OUT 14

10. TROUBLESHOOTING
- 10.1 TROUBLESHOOTING 15

11. MAINTENANCE
- 11.1 OPERATIONS TO BE CARRIED OUT AFTER THE FIRST 50 WORKING HOURS 16
- 11.2 WEEKLY OPERATIONS 16
- 11.3 MONTHLY OPERATIONS (OR MORE FREQUENTLY IF THE COMPRESSOR OPERATES IN VERY DUSTY AREAS) 16
- 11.4 OPERATIONS TO BE CARRIED OUT EVERY 6 MONTHS 17
- 11.5 OPERATIONS TO BE CARRIED OUT EVERY 2 YEARS 17
- 11.6 RECOMMENDED OILS 17

12. EXPLANATION OF SYMBOLS
- 12.1 EXPLANATION OF SYMBOLS 18

13. DISPOSAL
- 13.1 DISPOSAL 19

DECLARATION OF CONFORMITY ..... ENCLOSED

3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or:

Product Helpline (023) 8049 4344.

A proof of purchase must be provided.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

The compressors described in this manual are capable of supplying compressed air to a maximum pressure of 10 bar to operate pneumatic tools for a variety of applications including blowing, spraying and tyre inflating.

4.2 SPECIFICATION

Stock Nos.	55304	55305	55313	55315
Part Nos.	DA150/369S	DA150/369M	DA200/369S	DA200/369M
Rated voltage	230V~	230V~	230V~	230V~
Rated frequency	50Hz	50Hz	50Hz	50Hz
Rated input	2200W (3HP)	2200W (3HP)	2200W (3HP)	2200W (3HP)
Revolutions per minute (no load)	1,100min^{-1}	1,100min^{-1}	1,100min^{-1}	1,100min^{-1}
Maximum working pressure	145psi (10bar)	145psi (10bar)	145psi (10bar)	145psi (10bar)
Air displacement	13.03cfm (369L/min)	13.03cfm (369L/min)	13.03cfm (369L/min)	13.03cfm (369L/min)
Free air delivery	8.44cfm (239L/min)	8.44cfm (239L/min)	8.44cfm (239L/min)	8.44cfm (239L/min)
Receiver capacity	150 Litres	150 Litres	200 Litres	200 Litres
Sound power level	97dB(A)	97dB(A)	97dB(A)	97dB(A)
Sound pressure level	73.8dB(A)	73.8dB(A)	73.8dB(A)	73.8dB(A)
Dimensions (LxWxH)	1280x480x950mm	1280x480x950mm	1580x480x950mm	1580x480x950mm
Weight	98kg	102kg	109kg	113kg

4.3 HANDLING & STORAGE

Compressors 55305 and 55315 are designed to be moved to different locations. Ensure they are always operated on a level surface. When in transit care should be taken not to cause damage particularly to gauges and air lines.

5. HEALTH AND SAFETY INFORMATION

When using any type of power tool there are steps that should be taken to make sure that you, as the user, remain safe.

Common sense and a respect for the tool will help reduce the risk of injury.

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

Warning!

- Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Most important: You must know how to safely start and stop this machine, especially in an emergency.

Keep the work area tidy and clean. Attempting to clear clutter from around the machine during use will reduce your concentration. Mess on the floor creates a trip hazard. Any liquid spilt on the floor could result in you slipping.

Find a suitable location. If the machine is bench mounted; the location should provide good natural light or artificial lighting as a replacement. Avoid damp and dust locations as it will have a negative effect on the machine's performance. If the machine is portable; do not expose the tool to rain. In all cases do not operate power tools near any flammable materials.

Beware of electric shock. Avoid contact with earthed surfaces; because they can conduct electricity if there is an electrical fault with the power tool. Always protect the power cable and route it away from danger.

Keep bystanders away. Children, onlookers and passers by must be restricted from entering the work area for their own protection. The barrier must extend a suitable distance from the tool user.

Unplug and house all power tools that are not in use. A power tool should never be left unattended while connected to the power supply. They must be housed in a suitable location, away locked up and from children.

Do not overload or misuse the tool. All tools are designed for a purpose and are limited to what they are capable of doing. Do not attempt to use a power tool (or adapt it in any way) for an application it is not designed for. Select a tool appropriate for the size of the job. Overloading a tool will result in tool failure and user injury: This covers the use of accessories.

Dress properly. Loose clothing, long hair and jewellery are all dangerous because they can become entangled in moving machinery: This can also result in parts of body being pulled into the machine. Clothing should be close fitted, with any long hair tired back and jewellery and neck ties removed. Footwear must be fully enclosed and have a non-slip sole.

Wear personal protective equipment (PPE). Dust, noise, vibration and swarf can all be dangerous if not suitably protected against. If the work involving the power tool creates dust or fumes; wear a dust mask. Vibration to the hand, caused by operating some tools for longer periods must be protected against. Wear vibration reducing gloves and allow long breaks between uses. Protect against dust and swarf by wearing approved safety goggles or a face shield. These are some of the more common hazards and preventions; however, always find out what hazards are associated with the machine/work process and wear the most suitable protective equipment available.

Do not breathe contaminated air. If the work creates dust or fumes; connect the machine (if possible) to an extraction system either locally or remotely. Working outdoors can also help if possible.

Move the machine as instructed. If the machine is hand held, do not carry it by the power supply cable. If the product is heavy; employ a second or third person to help move it safely or use a mechanical device. Always refer to the instructions for the correct method.

Do not overreach. Extending your body too far can result in a loss of balance and you falling. This could be from a height or onto a machine and will result in injury.

5. HEALTH AND SAFETY INFORMATION

Maintain your tools correctly. A well maintained tool will do the job safely. Replace any damaged or missing parts immediately with original parts from the manufacturer. As applicable; keep blades sharp; moving parts clean, oiled or greased; handles clean; and emergency devices working.

Wait for the machine to stop. Unless the machine is fitted with a safety brake; some parts may continue to move due to momentum. Wait for all parts to stop; then unplug it from the power supply before making any adjustments, carrying out maintenance operations or just finishing using the tool.

Remove and check setting tools. Some machinery requires the use of additional tools or keys to set, load or adjust the power tool. Before starting the power tool always check to make certain they have been removed and are safely away from the machine.

Prevent unintentional starting. Before plugging any machine in to the power supply, make sure the switch is in the OFF position. If the machine is portable; do not hold the machine near the switch and take care when putting the machine down; that nothing can operate the switch.

Carefully select an extension lead. Some machines are not suitable for use with extension leads. If the tool is designed for use outdoors; use an extension lead also suitable for that environment. When using an extended lead, select one capable of handling the current (amps) drawn by the machine in use. Fully extend the lead regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled extension lead will both cause the cable to heat up and can result in fire.

Concentrate and stay alert. Distractions are likely to cause an accident. Never operate a power tool if you are under the influence of drugs (prescription or otherwise), including alcohol or if you are feeling tired. Being disorientated will result in an accident.

Have this tool repaired by a qualified person. This tool is designed to confirm to the relevant international and local standards and as such should be maintained and repaired by someone qualified; using only original parts supplied by the manufacturer: This will ensure the tool remains safe to use.

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR PRESSURE VESSELS

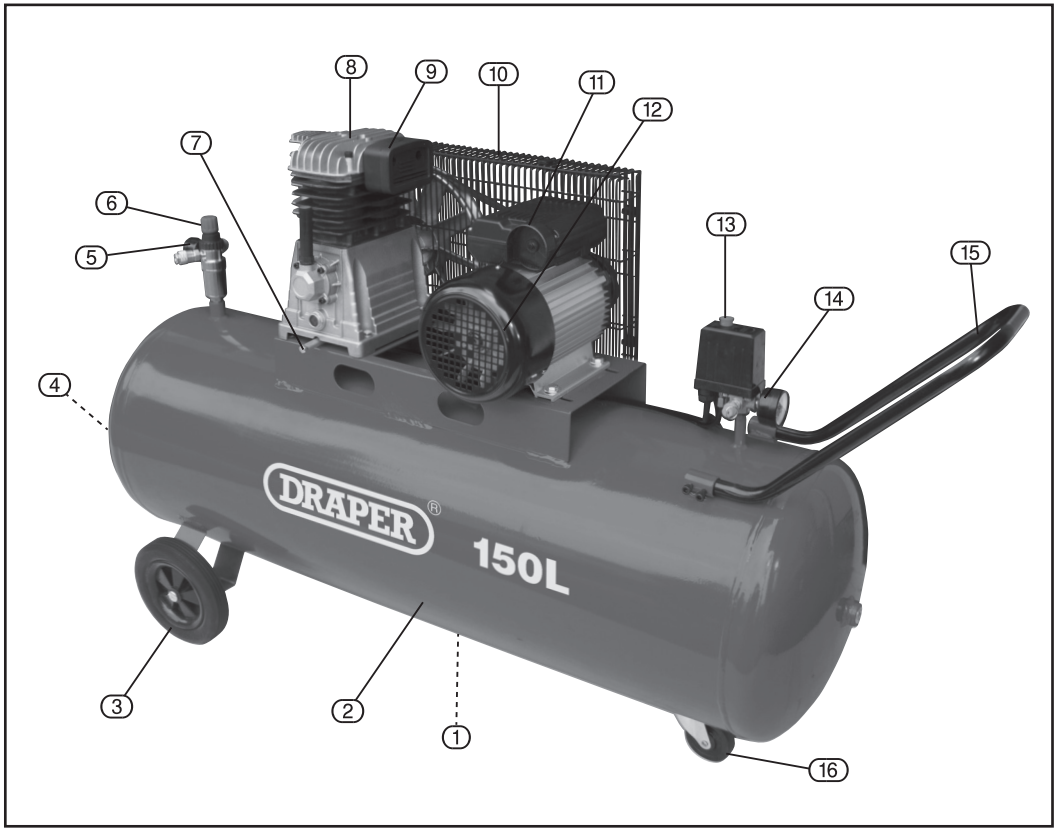
- This pressure tank is mainly intended for static use. It can only be charged with natural air within temperature and pressure limits as specified on the manufacturer's plate and declaration of conformity.
- Ensure that tank safety and control devices are efficient and flawless. When replaced, the tank should not be under pressure.
- Drain the condensation off the tank every day.
- Check for signs of inner corrosion at regular intervals. Tank walls should have a minimum thickness of 1.0 – 2.0mm.
- Any kind of welding to the tank is forbidden.
- The user shall comply with laws on pressure vessel operation in force in the country in which the tank is operated.
- The construction is mainly effected for permanent load by internal pressure. Cyclic loads are not considered, only for a range of 10% PS.

5.3 CONNECTION TO THE POWER SUPPLY

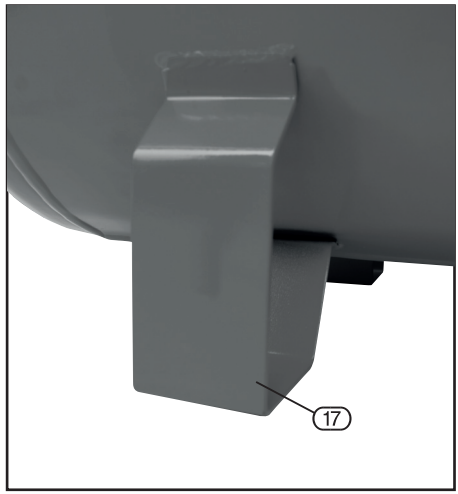
Make sure the power supply information on the machine's rating plate are compatible with the Power supply you intent to connect it to.
This product comes supplied with a UK standard 3 pin plug. It is designed for connection to a Domestic power supply rated at 230V AC.
It is Class I (earthed); is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.
If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instructions supplied with the extension lead. If using an extension lead, follow the instructions that came with your lead regarding maximum load while cable is wound, if in doubt ensure that the entire cable is unwound. Using a coiled extension lead will generate heat which could melt the lead and cause a fire.
This product requires an earth connection.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



1. Drain bung (condensate)
2. Reservoir tank
3. Rear wheels
4. Reservoir inspection plug
5. Line pressure gauge
6. Pressure regulator
7. Drain bung (oil)
8. Pump unit
9. Air filter
10. Pulley guard
11. Overload protection reset switch
12. Motor
13. Pressure switch
14. Tank pressure gauge
15. Handle
16. Front wheels
17. Foot plate



7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the machine from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the machine.

The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

7.2 WHAT´S IN THE BOX?

The packaging contains several parts and semi-assembled elements that require final assembly. Lay out the contents and check off the items against those featured below.

For 55305, 55315 only.

(18) Wheels x2.
(19) Axle shafts x2.
(20) Washers x2.
(21) Spring washers x2
(22) Nuts x2.
(23) Hex. key.
(24) Nut.
(25) Spring washer.
(26) Spring washer.
(27) Castor (55305), Castors x2 (55315).

8. PREPARING THE COMPRESSOR

8.1 ASSEMBLING THE REAR WHEELS

Pass the axle bolt (19) through the wheel (18) and the metal bracket (17) on the base of the tank and secure in place using washer (20), spring washer (21) and nut (22) provided.

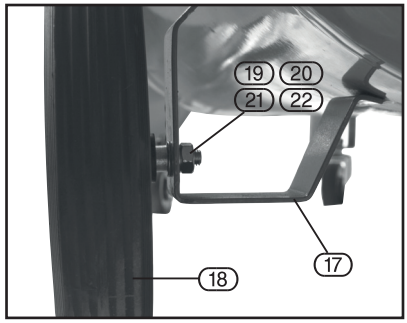


FIG.1

8.2 ASSEMBLING THE CASTOR - FIG. 2

To assemble the front castor (27), pass the threaded part of the castor through the centre bracket and secure in place using the washer and nut provided.

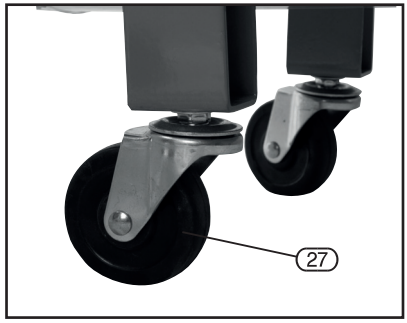


FIG.2

8.3 OIL LEVEL - FIG. 3

Ensure that the level of oil ranges between the max. and the min. mark on the vial (Fig.3).

FIG.3

9. OPERATION

9.1 INSTALLATION

Do not stand the compressor on any surface with a 15° or greater tilt in any direction as this could lead to possible running problems. Allow a minimum gap of 50cm around the compressor to aid the air flow.

In addition to pneumatic air tools, your compressor may be connected to several accessories suitable for blowing, washing and spraying.

This unit should be connected to an in-line air supply kit which incorporates a pressure reducer, lubricator and separator.

For technical specification and detailed instructions please refer to the instructions provided with the individual accessories.

9.2 INITIAL STARTUP - FIGS. 4 - 5

When starting the compressor for the first time, leave it running for about 10 minutes with the air escaping, to do this, pull back the collar and insert an empty male air line coupling on the female air outlet coupling and release the collar.

After this time, stop the compressor, remove the empty male air line coupling, switch the compressor back on and allow the tank to fill with air. Once at the maximum pressure, the compressor will stop. Check the pressure in the tank is correct on the tank pressure gauge (14).

The operation is automatically controlled by the pressure switch which stops the motor when the max. pressure allowed is achieved, and starts it again when the pressure goes below the minimum threshold (about 2 bar less than the max. pressure).

Warning: Never unplug the compressor or switch off the main switch to stop the compressor. Always position the pressure switch to the off position.

After the first 50 working hours, replace the oil.

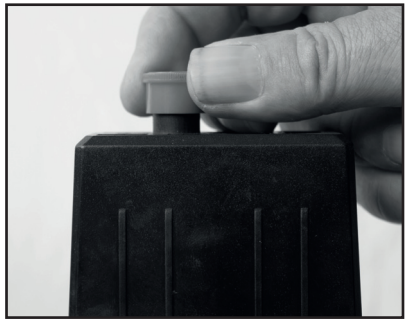


FIG.4

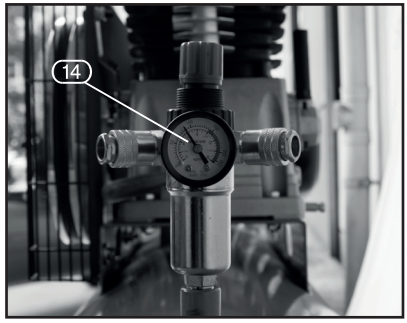


FIG.5

9.3 ADJUSTING THE PRESSURE SWITCH - FIG. 6

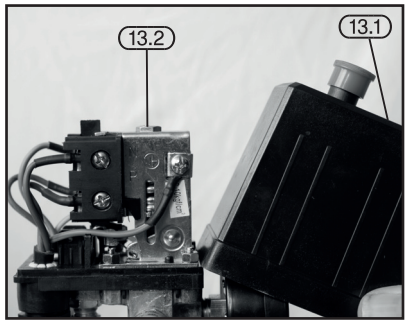


FIG.6

Note: This is the only operation where it is acceptable to switch the compressor off without using the pressure switch.

To decrease the pressure switch, run the compressor up to the desired capacity for the pressure switch to be set. At this point, turn the mains power off and do not operate the red button on the pressure switch as this will release the pressure. Disconnect the machine from the power source before loosening screw (13.1) to remove the black cover. With this removed, the adjustment bolt (13.2) will be visible. Adjust this anti-clockwise gently until the switch is heard to release the pressure. Release the cover and tighten the screw. The switch will now be set to the new pressure. To increase the pressure switch, remove the switch cover (having disconnected the machine from the power supply) and turn the adjustment bolt clockwise 3 turns and replace the switch cover.

Run the compressor up to the desired capacity for the pressure switch to be set (do not let the compressor run past it's maximum pressure). At this point turn the mains power off and disconnect from the supply. Remove the black cover and adjust bolt anti-clockwise gently until the switch is heard to release the pressure. Replace the cover and tighten the screw. The switch will now be set to the new pressure.

9.4 OVERLOAD CUT-OUT - FIG. 7

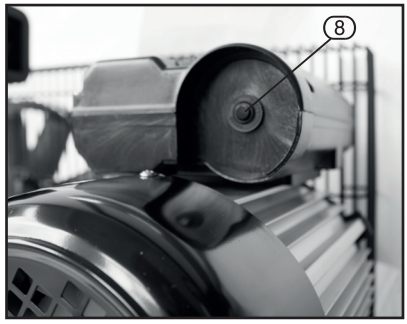


FIG.7

The compressor is equipped with an overload cut-out (8) which operates as a safety device to protect the motor. The device will activate in case of motor overload or overheating due to operation troubles. In this case, the safety device will automatically activate, disconnecting the compressor and avoiding possible motor damages. To restart the compressor, proceed as follows.

- Allow three minutes.
- Position the pressure switch to "0" OFF.
- Manually reset the thermal cut-out (8).
- Position the pressure switch to "1" ON.

If you restart the compressor and the overload cut-out releases again, turn the main switch to the OFF position, unplug the equipment and contact the Authorised Service Centre.

Note: After reconnection is complete, ensure that the tap is opened again. It is essential to connect an air line filter separator and lubricator to ensure a good, clean air supply is provided for the tool.

(**Note:** If the intended tool for use is a spray gun, use only a filter separator as lubrication will cause contamination of the material being sprayed).

Draper Stock No.43402 - Air filter, Regulator & Lubricator.

Draper Stock No.43394 - Air filter & Regulator.

To ensure an optimum air supply, please refer and carry out the following procedures as recommended.

10.1 TROUBLESHOOTING

USE ONLY ORIGINAL SPARE PARTS, AVAILABLE FROM AUTHORIZED SERVICE AGENTS.

FAULT	POSSIBLE CAUSE	REMEDY
• Pressure drop in tank	• Air leaks at connections	• Allow the compressor to reach max. pressure allowed. Switch it off and brush a soapy water solution onto all air connections. Look carefully for air bubbles flowing out. Tighten those connections where leaks are present. If the problem is still present, contact an authorized service agent
• The pressure switch valve leaks when the compressor is idle	• Non-return valve seal defective	• Contact your authorised agent
• The compressor stopped and does not start	• Overload cut-out tripped	• See Page 9
• The compressor does not stop even though the max. pressure allowed has been reached; the safety valve operates	• Incorrect Setting	• Contact your authorised agent
• The compressor does not get to the set pressure and overheats	• Compressor head gasket broken or valve faulty	• Contact your authorised agent
• The compressor is noisy with metallic clangs	• Bearing or connecting rod seizure	• Contact your authorised agent
• The compressor does not hold regular speed	• Belt is slipping	• Contact your authorised agent

11. MAINTENANCE

Some of the operations listed in this section will require the compressor to be returned to an authorised service agent.

Before carrying out any service or routine operation to your compressor, ensure the power has been cut off and all pressure has been released from the tank, so as to prevent any sudden unexpected restart. After any maintenance operation, make sure all components have been fitted correctly.

In order to keep your compressor in a good working condition, we recommend you to perform periodical servicing operations. Before performing any maintenance operation, switch off the compressor and ensure all air in the tank is released.

11.1 OPERATIONS TO BE CARRIED OUT AFTER THE FIRST 50 WORKING HOURS

Check that all screws and bolts are properly tight, paying special care to the head and crank case. Replace the lubricant.
Never mix different oils together. Do not use non-detergent oils or low quality oils as they have very poor lubricating properties. Do not dispose of the oil in the environment. Always contact your local authority for disposal.

11.2 WEEKLY OPERATIONS

Check the oil level and if necessary top up. Do not exceed the mark corresponding to the max. level. Make sure the oil does not drop below the minimum so as to avoid any damage or seizure. Drain condensation, while the tank is pressurised, by opening the valve (1) located under the tank. Open the valve by turning it anti-clockwise with a container under the valve. Keep the compressor in a position to allow all condensation to flow out completely. The tank must have pressure inside to force out any water present.

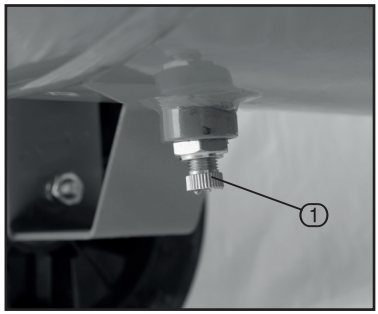


FIG.8

11.3 MONTHLY OPERATIONS (OR MORE FREQUENTLY IF THE COMPRESSOR OPERATES IN VERY DUSTY AREAS) - FIG.9

Remove the air filter (9) and replace or clean the element. Do not operate the compressor without the air filter fitted, as foreign bodies or dust could seriously damage the inside components.

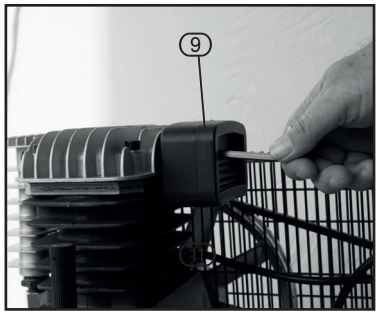


FIG.9

11.4 OPERATIONS TO BE CARRIED OUT EVERY 6 MONTHS - FIGS 10 - 12

Unscrew the oil dipstick and remove the drain plug (7) to change the oil. Collect the oil into a suitable container.

You should perform this operation when the compressor is hot so as to follow the oil to drain rapidly and completely. Pour in the new oil via the oil dipstick hole, up to the max. level and no higher.

It is advisable to clean all the finned parts of your compressor, so as to keep the cooling system efficient and to ensure a long work life to your machine. Check belt tension. Hang a weight of about 3kg at the midpoint of the belt. The belt should flex about 10mm.

If necessary, tension up the belt taking care not to disturb the pulley-to-flywheel alignment.

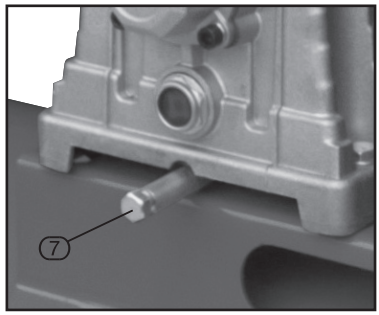


FIG.10

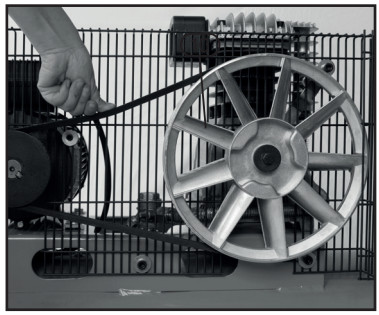


FIG.11

FIG.12

11.5 OPERATIONS TO BE CARRIED OUT EVERY 2 YEARS:

Check the non-return valve and if necessary replace the seal. Check intake and delivery valves in valve plates.

11.6 RECOMMENDED OILS:

Recommended oils with ISO grade 100 for compressors, in accordance with DIN 51506 Standard (suitable for room temperature ranging from +6°C and +25°C).

Use oils with an ISO grade 46/68 for a room temperature ranging from 0°C to +5°C.

Use oils with an ISO grade 150 for a room temperature ranging from +26°C to +45°C.

12. EXPLANATION OF SYMBOLS

12.1 EXPLANATION OF SYMBOLS

Warning!
Wear goggles.

Warning!
Wear ear defenders.

Warning!
Read instruction manuals before operating and servicing this equipment.

WEEE
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish

For indoor use.
Do not expose to rain.

Conforms to all relevant safety standards.

13. DISPOSAL

13.1 DISPOSAL

– At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
– Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not dispose of WEEE* as unsorted municipal waste.

** Waste Electrical & Electronic Equipment.*

CONTACTS

Draper Tools Limited, Hursley Road,
Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.

Helpline: (023) 8049 4344

Sales Desk: (023) 8049 4333

Internet: drapertools.com

E-mail: sales@drapertools.com

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:
For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

RWKC0618

©Published by Draper Tools Limited.
No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise without prior permission in writing from Draper Tools Ltd.